

**IN THE CLAIMS:**

Please add the following new claims:

- 1 40. A data collection apparatus, comprising a network of addressable sensing units for  
2 attaching to at least one structure or at least one live subject, said sensing units for  
3 sensing a parameter of the at least one structure or at least one live subject, said  
4 sensing units comprising a sensor, an addressable microprocessor, a first data  
5 storage device connected to said microprocessor, a first transmitting device and a  
6 first receiving device.
- 1 41. The apparatus as recited in claim 40, further comprising a control unit separable  
2 from said sensing units, said control unit comprising a second transmitter, a  
3 second receiver, and a second data storage device for storing data from said  
4 plurality of sensing units.
- 1 42. The apparatus as recited in claim 41, wherein said control unit can transmit  
2 address information to activate all sensor units or to activate specific sensor units.
- 1 43. The apparatus as recited in claim 41, wherein said control unit can provide an  
2 address to query each sensor unit individually.
- 1 44. The apparatus as recited in claim 41, wherein said second transmitting device is  
2 for transmitting a timing signal for synchronizing said plurality of sensing units.
- 1 45. The apparatus as recited in claim 40, wherein said microprocessor can query,  
2 activate, or send timing information to each sensor of said sensing unit  
3 individually or to all sensors at once.

1 46. The apparatus as recited in claim 40, wherein said sensor units further comprise a  
2 signal conditioner, an A/D converter, and a clock for microprocessor functions  
3 and to track time.

1 47. The apparatus as recited in claim 40, wherein said first data storage device is  
2 connected to said first transmitting device for transmitting data to said control  
3 unit.

1 48. The apparatus as recited in claim 40, wherein said first transmitter and said second  
2 transmitter are wireless transmitters.

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1 49. The apparatus as recited in claim 40, further comprising a triggering device for  
2 modifying the storing of data being stored to said first data storage device or for  
3 initiating transmission of data from said plurality of sensors to said control unit,  
4 wherein said triggering device is controlled by a real time change in information  
5 about the structure or live subject.

1 50. A data collection apparatus, comprising:

2 a plurality of sensing units for attaching to at least one structure or at least  
3 one live subject, said sensing units for sensing a parameter of the at least  
4 one structure or at least one live subject, said sensing units comprising a  
5 sensor, a first data storage device, a first transmitting device and a first  
6 receiving device; and

7 a control unit separable from said sensing units, said control unit  
8 comprising a second transmitting device for transmitting a timing signal  
9 for synchronizing said plurality of sensing units, a second receiver, and a  
10 second data storage device for storing data from said plurality of sensing  
11 units.

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1 51. The apparatus as recited in claim 50, wherein said sensor units are addressable  
2 and wherein said control unit is further for transmitting address information to  
3 said sensor units.

1 52. The apparatus as recited in claim 51, wherein said address information is to  
2 activate all sensor units or to activate specific sensor units based on the address of  
3 the individual sensor unit.

1 53. The apparatus as recited in claim 51, wherein said control unit can query each  
2 sensor unit individually.

1 54. The apparatus as recited in claim 50, wherein said sensor units further comprise a  
2 microprocessor wherein said microprocessor can query, activate, or send timing  
3 information to each sensor individually or to all sensors at once.